contacting said biological target molecule with a drug having an anchoring moiety specific for said chemically reactive group; and

identifying said drug having said anchoring moiety.

45 ~~38~~. The method in accordance with claim **37**, wherein said drug having an anchoring moiety is part of a library of compounds.

46 ~~39~~. The method in accordance with claim **37**, wherein said drug is a member of the group consisting of a peptide, a peptoid, a random bio-oligomer, a benzodiazepine, a hydantoin, a dipeptide, a vinylogous polypeptide, a nonpeptidal peptidomimetic, an oligocarbamate, a peptidyl phosphonate, a nucleic acid, an antibody, an isoprenoid, a thiazolidinone, a metathiazanone, a pyrrolidine, a morpholino compound, and a cyclopentane carboxylic acid.

47 ~~40~~. The method in accordance with claim **37**, wherein said biological target molecule is on a protein.

48 ~~41~~. The method in accordance with claim **40**, wherein said protein is a member selected from the group consisting of a β-adrenergic receptor, a calcium channel, a sodium channel, a potassium channel, membrane transporters and membrane receptors.

49 ~~42~~. The method in accordance with claim **37**, wherein said anchoring moiety is a member selected from the group consisting of a sulfhydryl-reactive group, an alkylating agent and an acylating agent.

50 ~~43~~. The method in accordance with claim **42**, wherein said anchoring moiety is a member selected from the group consisting of a methanethiosulfonyl group, a dithiopyridyl group, a reactive disulfide, an α-halo ketone, an α-diazo ketone, an activated ester, a pentafluorophenyl ester, and an anhydride.

51 ~~44~~. The method in accordance with claim **37**, wherein said compound has the formula:

A-L-D

wherein: A is a drug that is specific for said chemically reactive group;

L is a linking group; and

D is a drug.

SI 1/16/2001 Rule 1.126

52 ~~45~~. A method for identifying a drug that binds at a preselected target site on a biological molecule, said method comprising:

(a) providing a biological target molecule that comprises a chemically reactive group;

b) reacting said biological target molecule with a compound, said compound comprising (1) A, wherein A is an anchoring moiety and (2) L, wherein L is a linking group, wherein said anchoring moiety reacts with said chemically reactive group of said target molecule to form a covalent bond, thereby resulting in said anchoring moiety being attached to said target molecule through a covalent bond;

cont'

(c) combining said target molecule with one or more members of a library of drugs that are capable of covalently bonding to said linking group, wherein at least one member of said library forms a covalent bond with said linking group to form a target molecule conjugated to A-L-D, wherein D is said at least one member of said library forming said covalent bond; and

(d) identifying said drug, D, that forms a covalent bond with said chemically reactive group.

53 ~~46~~. The method in accordance with claim **45**, wherein said drug is a member of the group consisting of a peptide, a peptoid, a random bio-oligomer, a benzodiazepine, a hydantoin, a dipeptide, a vinylogous polypeptide, a nonpeptidal peptidomimetic, an oligocarbamate, a peptidyl phosphonate, a nucleic acid, an antibody, an isoprenoid, a thiazolidinone, a metathiazanone, a pyrrolidine, a morpholino compound, and a cyclopentane carboxylic acid.

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54 ~~47~~. The method in accordance with claim **45**, wherein said biological target molecule is on a protein.

55 ~~48~~. The method in accordance with claim **47**, wherein said protein is a member selected from the group consisting of a β-adrenergic receptor, a calcium channel, a sodium channel, a potassium channel, membrane transporters and membrane receptors.

56 ~~49~~. The method in accordance with claim **45**, wherein said anchoring moiety is a member selected from the group consisting of a sulfhydryl-reactive group, an alkylating agent and an acylating agent.

57 ~~50~~. The method in accordance with claim **49**, wherein said anchoring moiety is a member selected from the group consisting of a methanethiosulfonyl group, a dithiopyridyl group, a reactive dissulfide, an α-halo ketone, an α-diazo ketone, an activated ester, a pentafluorophenyl ester, and an anhydride.

58 ~~51~~. A method in accordance with claim **45**, wherein said biological target molecule comprises a protein target and a bifunctionally chemically reactive group.

59 ~~52~~. A method for identifying a drug that binds at a preselected target site on a biological molecule, said method comprising:

identifying a first drug that is specific for a first target site on a protein;

identifying a second drug that is specific for a second target site on said protein, wherein said first drug and said second drug are linked by a formula

A-L-D

wherein: A is a first drug that is specific for a first target site on a protein;

L is a linking group; and

D is a second drug, wherein D is specific for a second target site on said protein, thereby identifying said drug.

60 ~~53~~. The method in accordance with claim **52**, wherein A is a member of a combinatorial library of compounds.

61 ~~54~~. The method in accordance with claim **52**, wherein D is a member of a combinatorial library of compounds.

ST 1/16/2001 Rule 1.126 Amdt RS cont

62 ~~55~~. The method in accordance with claim **52**, wherein said first drug is a member of the group consisting of a peptide, a peptoid, a random bio-oligomer, a benzodiazepine, a hydantoin, a dipeptide, a vinylogous polypeptide, a nonpeptidal peptidomimetic, an oligocarbamate, a peptidyl phosphonate, a nucleic acid, an antibody, an isoprenoid, a thiazolidinone, a metathiazanone, a pyrrolidine, a morpholino compound, cyclopentane carboxylic acid, phenylalkylamines and dihydropyridines.

63 ~~56~~. The method in accordance with claim **52**, wherein said biological target molecule is on a protein.

64 ~~57~~. The method in accordance with claim **56**, wherein said protein is a member selected from the group consisting of a β-adrenergic receptor, a calcium channel, a sodium channel, a potassium channel, membrane transporters and membrane receptors.

65 ~~58~~. The method in accordance with claim **52**, wherein said anchoring moiety is a member selected from the group consisting of a sulfhydryl-reactive group, an alkylating agent and an acylating agent.

66 ~~59~~. The method in accordance with claim **58**, wherein said anchoring moiety is a member selected from the group consisting of a methanethiosulfonyl group, a dithiopyridyl group, a reactive dissulfide, an α-halo ketone, an α-diazo ketone, an activated ester, a pentafluorophenyl ester, and an anhydride.

REMARKS

Claims 1-59 are pending in this application. Claims 37-59 are newly added. Early examination on the merits is respectfully requested.

SUPPORT FOR NEW CLAIMS

Support for new claims 37-59 is found throughout the specification as originally filed. More particularly, support for claims 37, 45 and 52 is found, *inter alia*, on page 16, lines 1-14; and in claim 30, page 51.